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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,604	07/16/2003	Jung-Hwan Kim	1349.1206	6533
21171	7590	12/16/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LAXTON, GARY L	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/619,604	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> Gary L. Laxton	<b>Art Unit</b> 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Inventorship***

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Specification***

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second switching unit connected to a power supply terminal of the USB interface of claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Applicant should take care to ensure all claimed limitations are shown.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1, 5-7, 12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Huh et al (US 6,252,783).

Claims 1, 5-7, 12 and 13; Huh et al discloses a power supply controlling device of an electronic equipment, comprising: a first rectifying unit (BD) rectifying an alternating voltage (AC) supplied from a power supply cord and outputting a first rectified voltage (Vin); a transformer (L1, L2) comprising a primary winding (L1) wired to receive the first rectified voltage (Vin) from the first rectifying unit (BD), and a secondary winding (L2) coupled to the primary winding (L1); a first switching unit (Qsw) performing an on/off operation by supplying current to the primary winding (L1); a pulse width modulating unit (380) controlling the on/off operation of the first switching unit; and a power supply controlling unit (500) outputting a signal controlling the pulse width modulating unit, wherein the pulse width modulating unit switches the first switching unit to on/off depending on a reception of a power-on signal which is supplied externally.

6. Claims 1 and 5-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Choo et al (US 6,674,271).

Choo et al disclose a power supply controlling device of an electronic equipment, comprising: a first rectifying unit (201) rectifying an alternating voltage (AC) supplied from a power supply cord and outputting a first rectified voltage; a transformer (215) comprising a primary winding wired to receive the first rectified voltage from the first rectifying unit, and a

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secondary winding coupled to the primary winding; a first switching unit (FET) performing an on/off operation by supplying current to the primary winding; a pulse width modulating unit (210) controlling the on/off operation of the first switching unit; and a power supply controlling unit (230) outputting a signal controlling the pulse width modulating unit, wherein the pulse width modulating unit switches the first switching unit to on/off depending on a reception of a power-on signal which is supplied externally.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-4 and 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choo et al (US 6,674,271) in view of Johnson et al (US 6,801,730).

Claims 2-4; Choo et al disclose the claimed subject matter in regards to claim 1 supra, except for a USB interface unit.

Johnson teaches using a USB interface unit to communicate between a computer and printer in order to manage the power consumption of the system.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a system with a computer and printer and connecting the two to form printing system with power management as taught by Johnson et al.

Claims 14-24; Choo et al disclose a system comprising: a signal processing unit; a printing unit; a DC/DC converter converting a power supply voltage into a lower voltage required by the signal processing unit, and outputting the converted voltage to the signal processing unit; an input unit receiving a printing command; and a power supply controlling device comprising a first switching unit, a pulse width modulating unit, a power supply switch providing a power on/off signal from a user, and a power supply controlling unit outputting a control signal to the pulse width modulating unit to control the first switching unit to perform an on/off operation corresponding to the power on/off signal from the user.

However, Choo et al does not disclose connecting a printer and a host computer.

Johnson et al teach a system for power management comprising a host device (computer, USB port etc), connecting a printer (10) and managing the power.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a system with a computer and printer and connecting the two to form printing system with power management as taught by Johnson et al.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,408,148 Yamamoto discloses an image processing apparatus and power supply used therein; US 6,407,734 Kommine et al disclose a power supply system with power reduction mode; US 6,093,916 Toyoizumi discloses a control dice with power control elements to control a heater drive apparatus; US

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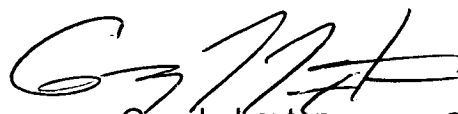
6,088,244 Shioya et al discloses a switching power supply used for printers; US

5,995,397 Kim discloses a power supply controller for a printer.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gary L. Laxton  
Patent Examiner  
Art Unit 2838  
12/13/04